

Passenger Rail in Virginia:

Current Rail Initiatives to Improve Passenger Rail Service in the Commonwealth

July 13, 2006

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National Passenger Rail Corridors



National Passenger Rail

Federal Legislation

- ❑ Amtrak funding approved at \$1.16 Billion for FY 2007
- ❑ Key Amtrak issues:
 - Leadership
 - Northeast Corridor
 - Continued push for states to fund the service
- ❑ US Senate: some movement (S. 1516) to fund the federal share for national passenger rail in the states
- ❑ Virginia's position: any shift to the states is an unfunded mandate

“Higher” Speed Rail in Virginia

- ❑ Focus on “higher” speed rail
- ❑ High speed rail: 90-110 mph
 - Requires major, costly improvements to operate at this speed
 - Would be difficult to achieve within a reasonable time frame, given the level of funding currently available
- ❑ Many quick, high-impact improvements possible within the existing rail system:
 - Most trains in VA operate at 45 mph on average, while the speed limit is 70-79 mph
 - Need to bring average operating speed closer to maximum speed

Virginia Railway Express Proposed Service Extension to Gainesville and Haymarket

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July 13, 2006



VRE Gainesville/Haymarket

Project Scope

Conduct a Feasibility Study of 11 mile extension from Manassas to Haymarket

- ☐ Develop detailed cost estimates
- ☐ Develop construction phasing
- ☐ Update ridership forecasts
- ☐ Identify potential environmental and right-of-way issues
- ☐ Determine impact of the extension on the rest of the VRE System

VRE Gainesville/Haymarket

Budget and Schedule

☐ Budget

- Total Cost	\$121.0
- REF Phase 1 approved	\$0.7
- Match Phase 1	\$0.3
- REF Phase 2 (Estimate)	\$60.0
- Match Phase 2	\$60.0

☐ Schedule

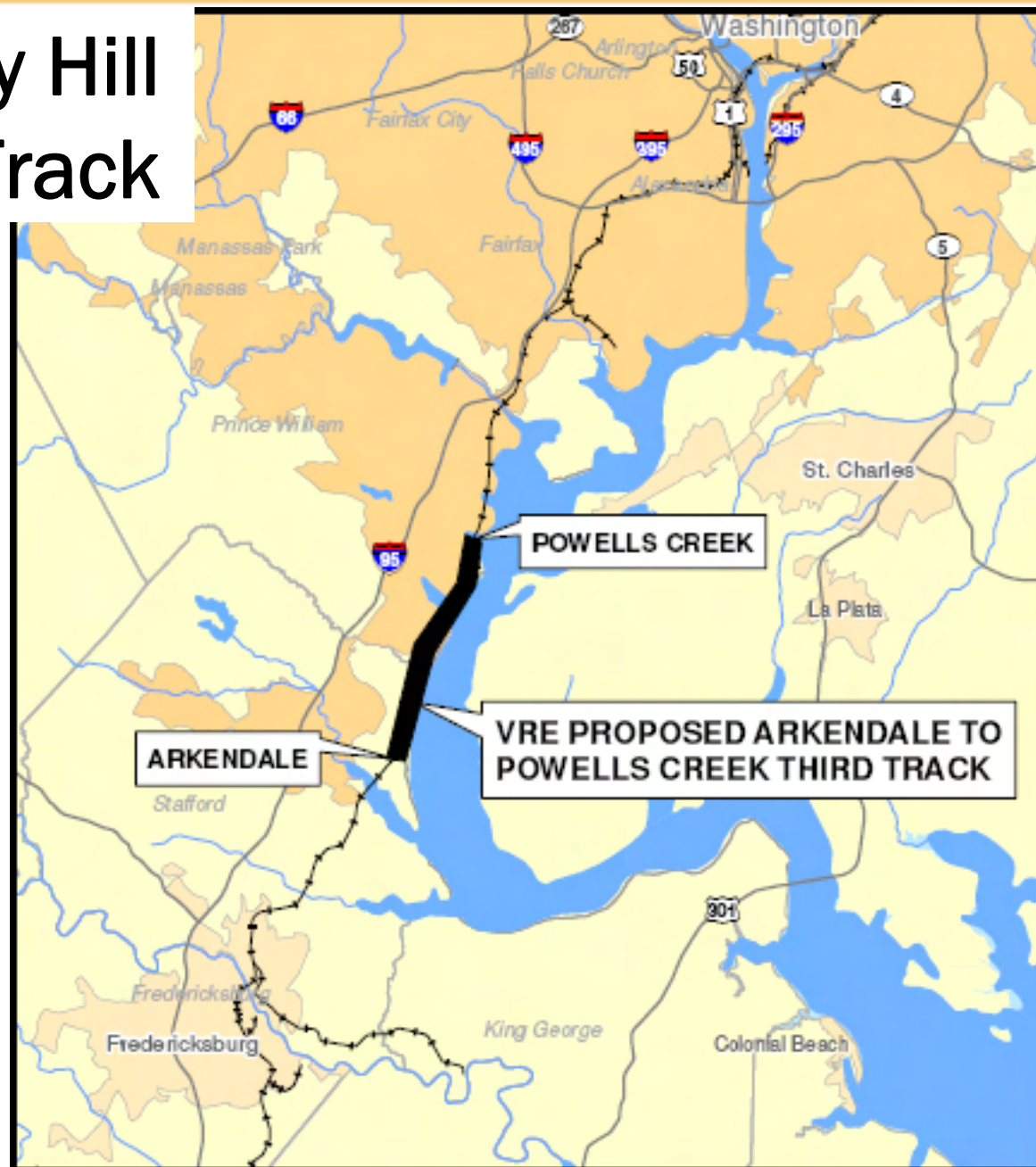
Sept. 2006	Begin Phase
I - PE and NEPA	
Sept. 2007	Complete
Phase 1	
Spring 2009	Begin
Construction (Estimated)	

Virginia Railway Express Proposed Cherry Hill Third Track

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Cherry Hill 3rd Track



VRE Cherry Hill 3rd Track

Project Scope

- ❑ Preliminary Engineering of 11.4 miles of 3rd main track between Arkendale and Powell's Creek
- ❑ Conduct National Environmental Policy Act (NEPA) analysis of this proposed 3rd track
- ❑ Develop project benefits and measurements to determine performance requirements
- ❑ Local match provided by developer of Harbor Station at Cherry Hill, includes the following:
 - Design & construct VRE double platform at Cherry Hill Station
 - Design & construct the bridge over CSX tracks to replace existing Cherry Hill Rd. at-grade crossing
 - Design & construct 550 space parking structure for commuters at the Cherry Hill Station

VRE Cherry Hill 3rd Track

Budget and Schedule

☐ Budget

- Total Cost	\$72.0
- REF Phase 1 approved	\$2.5
- Match Phase 1	\$1.1
- REF Phase 2 (Estimate)	\$47.7
- Match Phase 2	\$20.7

☐ Schedule

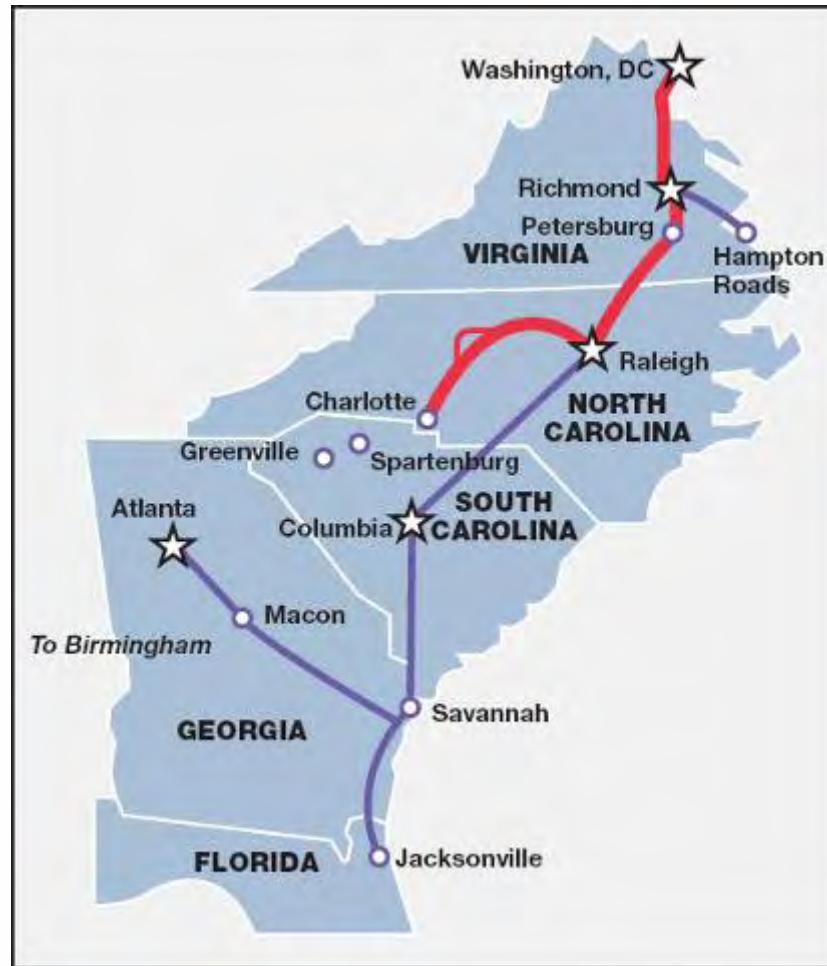
Sept. 2006	Begin Phase
I - PE and NEPA	
Sept. 2007	Complete
Phase 1	
Spring 2008	Begin
Construction	

Southeast High Speed Rail Corridor

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Southeast High Speed Rail Corridor



Southeast High Speed Rail

Project Schedule

- 1998** Memorandum of Understanding (MOU)
DRPT, NCDOT Rail, FRA, FHWA
- 1999** Tier I EIS - Joint VA/NC effort
- 9 alternatives
 - Over 1,200 miles of rail right of way
 - Over 7,000 phone contacts
 - Over 225,000 direct mail contacts
 - 26 public workshops, 26 official workshops, 18 public hearings
- 2002** Tier I EIS Record Of Decision by FRA
and FHWA

Southeast High Speed Rail

Primary Outcomes from Tier I EIS

- ❑ Established project purpose & need
 - Provide competitive option
 - Ease growth of congestion
 - Improve safety & energy effectiveness
 - Reduce pollution emissions
 - Improve transportation effectiveness while minimizing environmental impacts
- ❑ Modal Alternative Selected
 - Incremental approach
 - Fossil fuel engines
 - 110 mph max. speed
- ❑ Established preferred study corridor

Southeast High Speed Rail

Tier II - Raleigh to Richmond (168 mi.)

May 2003	Notice to Proceed
July/Aug 2003	9 Public Workshops
2004/2005	Environmental Field Work Preliminary Engineering Public Involvement
Dec. 2005	REF Grant to extend to Richmond
Oct. 2007	Complete Draft EIS
April/May 2008	Public Hearings
Aug. 2008	Complete Final EIS
Dec. 2008	Record of Decision from FRA



Southeast High Speed Rail

Alternative Routes Richmond to Petersburg



Southeast High Speed Rail

Service Improvements

- ❑ High-speed train sets
- ❑ Reduced travel time
- ❑ Increased frequency
- ❑ Service expansion

Time frame: within 10 years

Travel Time Goal:

9:15 → 6:00

Southeast High Speed Rail

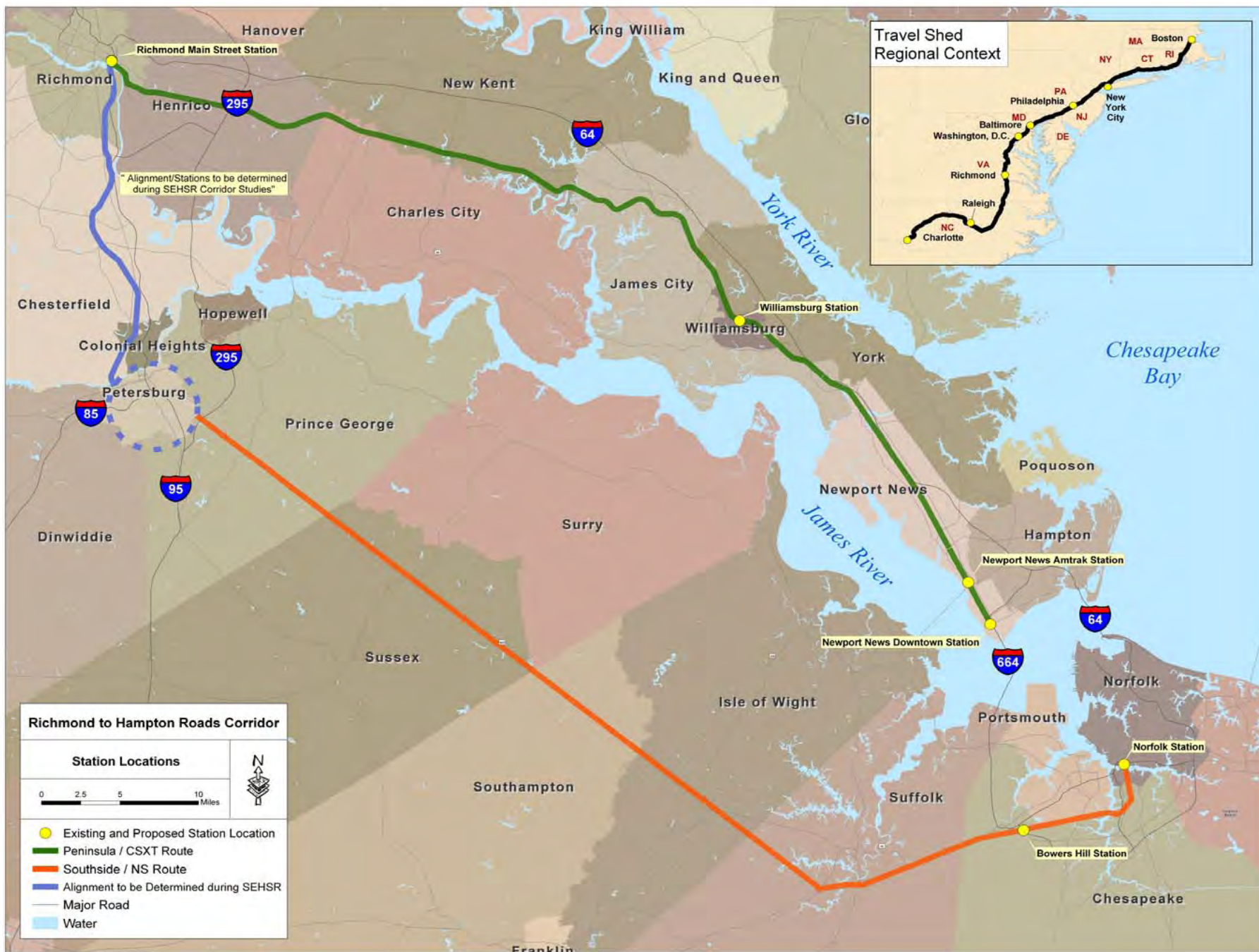
Moving Forward

- ❑ Strong political support in both states
- ❑ Funding support in both states
- ❑ Current approach is incremental with limited state funds
- ❑ Ability to move forward to design and construct entire SEHSR system is dependent on a federal program
- ❑ Need to develop operations and maintenance plan

Richmond/Hampton Roads Passenger Rail Study

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Richmond to Hampton Roads

Proposed Alternatives

		79 MPH	90 MPH			110 MPH		
Alternative	High Speed Route	Travel Time	Cost (M)	Ridership	Travel Time	Cost (M)	Ridership	Travel Time
Alternative 1 3 CSXT/6 NS	Southside	1:16	*\$191.4	815K - 1.10M	1:35	*\$231.0	852K - 1.15M	1:27
Alternative 2a 3 NS/6 CSXT	Peninsula	1:38	*\$347.1	794K - 1.11M	1:03	*\$406.3	818K - 1.15M	0:57
Alternative 2b 9 CSXT	Peninsula	1:38	\$192.9	777K - 1.09M	1:03	\$252.1	809K - 1.14M	0:57

Notes:

2025 Ridership Projections

Cost in 2004 Dollars (In Millions)

Time measurement in Hours : Minutes

*Does not include cost for Petersburg to Richmond =\$87.1



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Richmond to Hampton Roads

Project Schedule

- ☐ Nov 2003 EIS project started
- ☐ Spring 2004 Public Scoping Meetings
- ☐ Summer 2005 Alternatives Analysis Completed
- ☐ Spring 2006 Preliminary Draft EIS prepared & submitted to FRA
- ☐ Summer 2006 Review FRA comments and preparation of Draft EIS
- ☐ Fall 2006 Draft EIS issued and public hearings

Richmond to Hampton Roads

Next Steps

Schedule for completion of the following tasks dependent on funding:

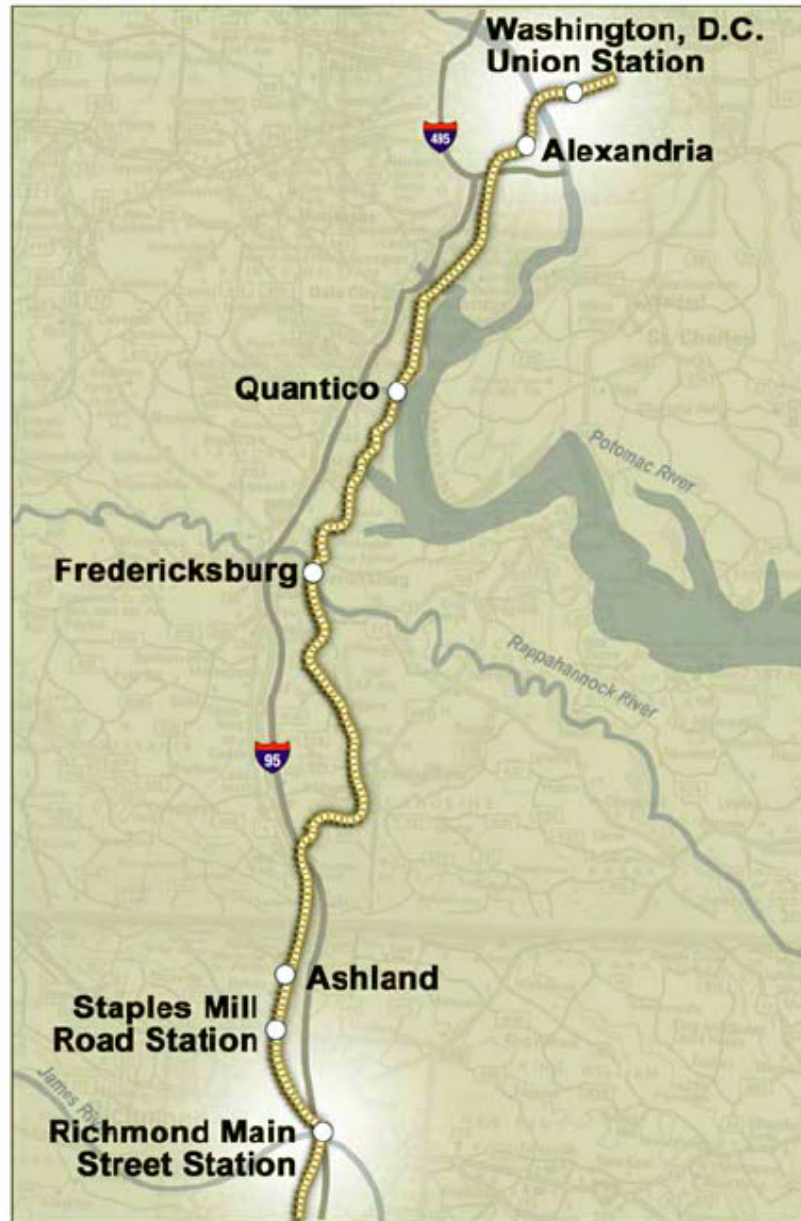
- ☐ Completion of Final Tier I EIS and Record of Decision
- ☐ Completion of Tier II EIS
- ☐ Final Design
- ☐ Construction
- ☐ Operations

Washington, DC to Richmond Corridor Improvements

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Washington, DC to Richmond Corridor



Virginia Rail Needs 2004 – 2025

Washington, DC to Richmond Corridor

Needs:

- ☐ Complete 3rd track
- ☐ Upgrade signal system
- ☐ Add crossovers
- ☐ Cost: \$400 Million +

Benefits:

- ☐ Reduce travel time by 30 minutes
- ☐ Increase maximum speed to 90 mph
- ☐ Increase frequency, capacity and reliability for both freight and passenger rail

Projects Underway

Washington, DC to Richmond Corridor

VTA 2000 Funds

Project	Cost (Millions)	Completion Date
Arkendale Crossover	\$5.6	Completed
Elmont Crossover	\$6.0	July 2006
L'Enfant 3 rd Track	\$6.2	Spring 2007
RO-SRO 3 rd Track	\$5.9	Spring 2007
Quantico Bridge (VRE)	\$6.0*	Spring 2007
Franconia 3 rd Track	\$9.7	Summer 2007
Fredericksburg 3 rd Track	\$6.0	Fall 2007

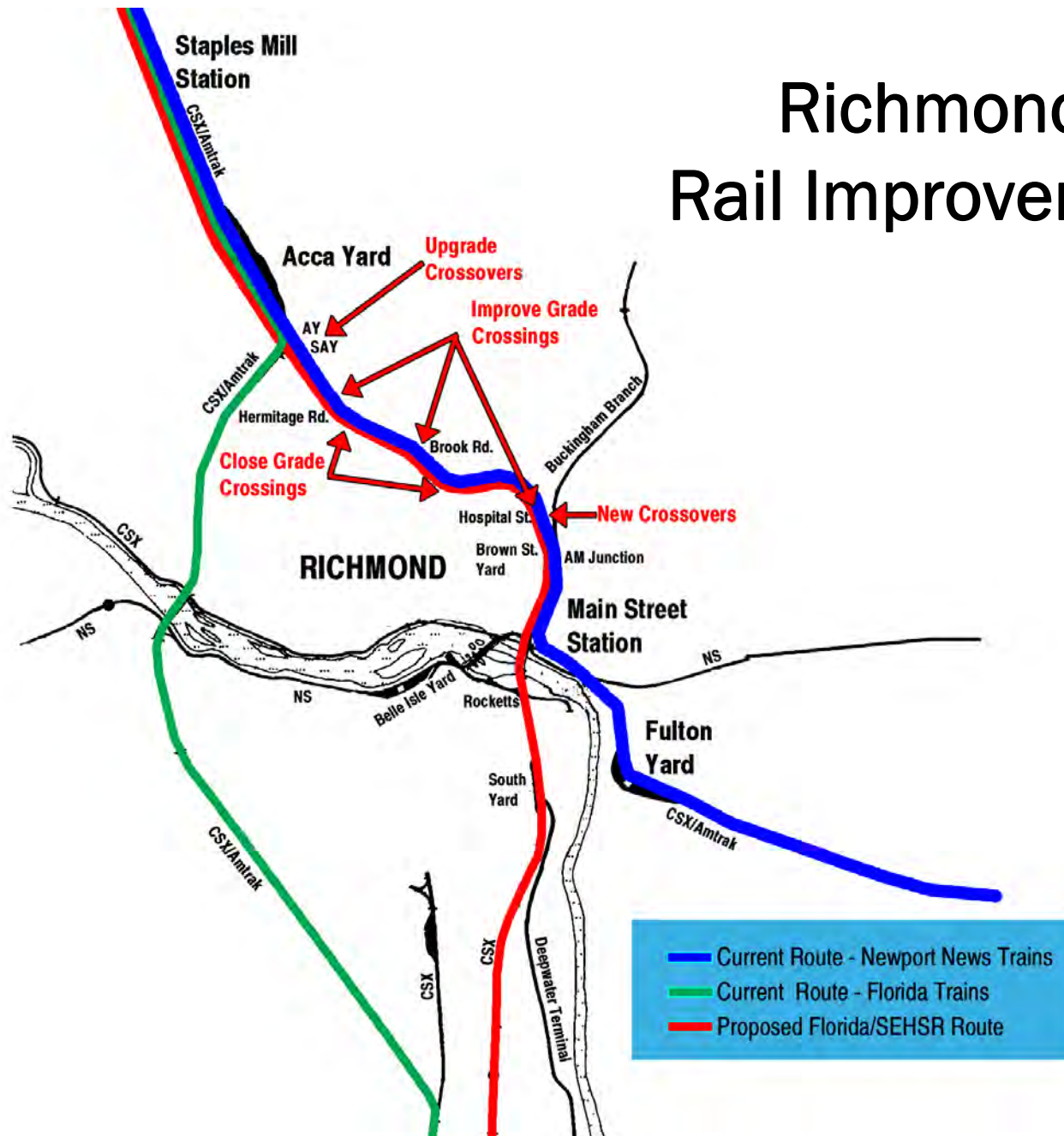
* State share. There is also \$20 million in federal funding.

Washington, DC to Richmond Corridor

Quantico Creek Bridge



Richmond Area Rail Improvements



Richmond Area Improvements

Short Term Projects

Staples Mill to Main Street Station

Projects:

- ☐ Upgrade tracks and signals and realign curves to increase speed from 25 mph to 40 mph
- ☐ Upgrade three grade crossings
- ☐ Eliminate three grade crossings
- ☐ Install new universal crossover

Benefits:

- ☐ Reduce travel time by 5-7 minutes (estimated)
- ☐ Increase reliability
- ☐ Estimated completion: 2007

Estimated cost: \$14.9 Million

Funds currently available: \$12.5 Million

Main Street Station

Bringing More Trains Downtown

- ❑ Turning & storage facility near Main St. Station
- ❑ Acca Yard improvements
- ❑ Track upgrades for speed and capacity
- ❑ Improvements from Main St. Station south to Centralia to allow through-trains to serve downtown

Acca Yard Study

- ☐ Major bottleneck for both freight and passenger trains
- ☐ Study is underway
- ☐ Funding
 - \$500K from Statewide Multimodal Planning Funds
 - CSX and Amtrak support
- ☐ Study Completion date: April 2007



Washington, DC to Richmond Corridor

Update of Costs and Priorities

- ❑ “Caboose Bill” provided \$200K funding to update corridor plan:
 - Identify additional right-of-way needed
 - Identify major environmental issues;
 - Develop a phased implementation plan including schedule and financing
 - Review legal and regulatory issues
 - Estimate the cost electrifying corridor
 - Report due December 1, 2006
- ❑ Additional \$500K Multi-Modal Planning Funds will be used to refine capital and operating cost estimates

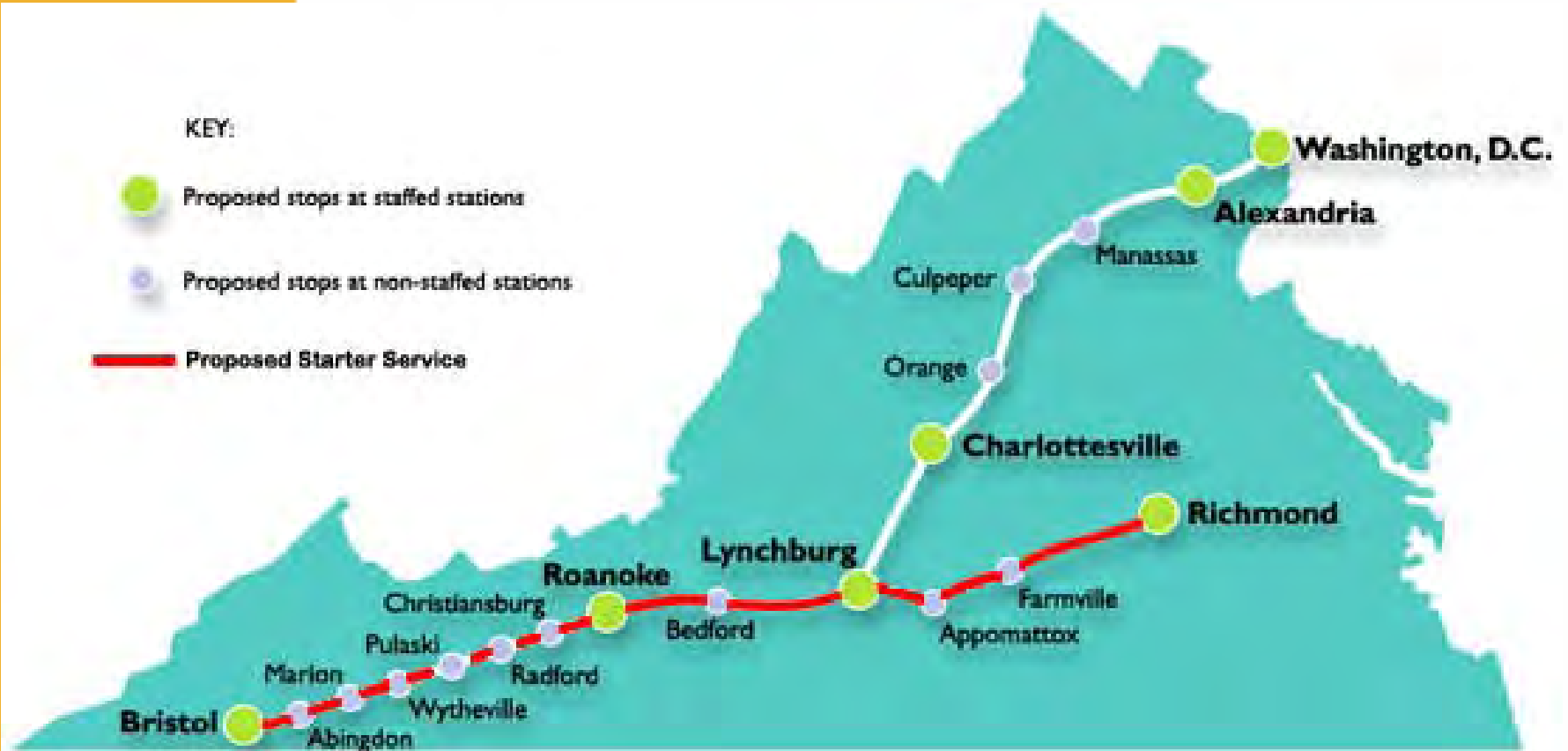
TransDominion Express

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TransDominion Express

Proposed Route and Stations



TransDominion Express Need

- ☐ Provides a transportation alternative to under-served region of the Commonwealth
- ☐ Connects southwest Virginia with the rest of the state
- ☐ Economic development tool for the communities along the route

TransDominion Express

Project Schedule

- 1999 Bristol Rail Passenger Study
- 2000 Committee to Advance the TransDominion Express created
- 2001 Norfolk-Southern Study
- 2001 Amtrak Study
- 2004 Norfolk Southern Study on starter service
- 2005 Report to the General Assembly
- 2005 TDX Committee Incorporated as a 501(c)3 non-profit
- 2006 Additional report requested by General Assembly

TransDominion Express

Cost of Full Service

From General Assembly Report (HD 37)

(In \$Millions)	Estimated Travel Time	Total Capital Costs	Annual Operating Costs
Total System Costs			
Bristol-Washington	8:18	\$120.0*	\$14.5
Bristol-Richmond	7:45		
Purchase & Refurbishment of 5 Rail Cars		\$2.5	\$0.0
Total Costs		\$122.5	\$14.5
State Funds Available		\$8.5 ¹	\$0.0
Unfunded Balance		\$114.0	\$14.5

* Estimates of the total system capital and operating costs are preliminary and based on studies that were conducted in 2001. These estimates are under review and subject to further study.

¹ Funding from the Virginia Transportation Act of 2000

TransDominion Express

Cost of Proposed Starter Service

(In \$Millions)	Estimated Travel Time	Total Capital Costs	Annual Operating Costs
Demonstration Service			
Bristol-Richmond	10:00	20.0	\$8.0
DC-Charlottesville (VRE Extension)	2:30	\$2.0	\$1.1
Purchase & Refurbishment of 5 Rail Cars		\$2.5	\$0.0
Total Costs		\$24.5	\$9.1
State Funds Available		\$8.5 ¹	\$0.2 ²
Unfunded Balance		\$16.0	\$8.9

¹ Funding from the Virginia Transportation Act of 2000.

² Service to Charlottesville by extension of VRE may be eligible for funding under the current State Mass Transit Trust Fund Formula Program. However, unless new funding is made available, this will have a negative impact on transit systems that are already funded through this program.

TransDominion Express

Overview of Startup Issues

□ Governance

- TDX, Inc. has taken important 1st step of incorporating
- TDX, Inc. is applying for grants to fund staff and operations
- Inter-jurisdictional agreements not currently in place
- Legislation to create TDX Authority sent back to committee by General Assembly

□ Operating Issues

- Who operates - Norfolk Southern?
- Operating cost
 - Liability
 - Access
- Storage

TransDominion Express

Additional Startup Issues

- ☐ Need for a financial plan:
 - Short and long-term capital needs
 - Short and long-term operating subsidies.
 - Sources of funding
 - Implementation schedule
- ☐ Options for phasing starter service
 - Bristol to Richmond
 - Charlottesville to Washington, DC (VRE extension)
 - Roanoke to Washington, DC
- ☐ Subject to negotiations with:
 - Norfolk Southern
 - VRE (Charlottesville extension)
 - CSX (Access to Union Station and Main St. Station)
- ☐ Possible purchase of five railcars from VRE

TransDominion Express

Updated System Study

- ❑ FY 2006 – 2008 Budget Bill directs DRPT to update study
 - Revise capital and operating costs
 - Estimate potential revenue
 - Determine potential to alleviate congestion
 - Study due on January 2, 2007
 - No funding provided
- ❑ Need to analyze relationship between TDX improvements and other rail initiatives:
 - I-81
 - Heartland Corridor
 - VRE service extensions
 - Washington, DC to Richmond corridor service

Passenger Rail Projects

Upcoming Milestones

2006	July	Completion of Elmont Crossover
	October	Completion of Richmond/Hampton Roads DEIS
	December	Completion of Washington, DC – Richmond Corridor Priority Plan
2007	January	Completion of TDX Update
	March	Completion of Quantico Creek Bridge
	April	Completion of Acca Yard Study
	May	Completion of L'Enfant 3 rd Track
	June	Completion of RO-SRO 3 rd Track
	August	Completion of Franconia 3 rd Track
	September	Completion of VRE Gainesville/Haymarket Extension Feasibility Study
	September	Completion of VRE Cherry Hill 3 rd Track PE and Environmental Study
	October	Completion of SEHSR Tier II DEIS
	November	Completion of Fredericksburg 3 rd Track
	December	Completion of Richmond Improvements



Virginia Department of Rail and Public Transportation

The Smartest Distance Between Two Points

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